

## Heterophosphacyclanes in organic synthesis

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### Abstract

The review gives a systematic account of the use of mono- and di-heterophosphacyclanes, containing  $\sigma^3$ -,  $\sigma^4$ - and  $\sigma^5$ - phosphorus atoms, for the synthesis of phosphorus-free organic substances. Data concerning the reaction mechanisms, the reactivities of cyclic organophosphorus compounds, and the factors determining the synthetic result of their chemical reactions are presented. In certain cases, the effectiveness of the employment of cyclic and acyclic phosphorus-containing reagents is compared. The bibliography includes 178 references. © 1994 Russian Academy of Sciences and Turpion Ltd.

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